THE A.P.R.O. BULLETIN

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TUCSON, ARIZONA

MARCH-APRIL, 1973

OCCUPANT REPORT FROM YUGOSLAVIA

"National Enquirer" Awards \$5,000

In early 1972 the *National Enquirer* announced that they would pay a \$50,000 cash award to anyone who could furnish evidence that UFOs came from outer space. After a year of sifting reports it was decided that none of the entries met the criteria set up by the *National Enquirer's* panel of scientists. However, it was decided that the contest would be continued through 1973 and that the deadline would be set at January 1, 1974.

In the meantime, the Durel Johnson family of Delphos, Kansas was awarded \$5,000 for the evidence submitted by them. On May 28th of 1972 a toadstool-shaped object allegedly hovered over the ground near the Johnson farmhouse and left a mysterious glowing ring in the soil. The Johnson case was one of more than 1,000 claims made for the \$50,000 award and although the evidence does not prove an outer space origin, it was established that it was not a natural phenomenon.

The panel of experts who judged the entries was made up of Dr. James A. Harder, Dr. J. Allen Hynek, Dr. Robert Creegan, Dr. Frank B. Salisbury and Dr. R. Leo Sprinkle. All but Dr. Hynek are members of APRO's consulting staff. Four of the members of the panel voted that the Johnson family case merited the \$5,000 award, and called their case "a major scientific mystery—the most baffling case the panel encountered in a full year of investigation." Both Dr. Harder and Dr. Hynek visited the site during the course of the investigation.

One characteristic of the strange ring left by the object at the Johnson farm was the dry, powdery nature of the soil more than a year after the incident. The soil would not accept water nor could anything be grown in it. Samples of the soil have stumped laboratory researchers and tiny white crystals which were found imbedded in the soil have defied laboratory analysis. Tests are still being conducted and the panel will report on any further findings.

Mr. Lorenzen, as Director of the consulting organization (APRO) has

The Piedmont, Missouri Mess

At about the middle of February, 1973, residents in and around Piedmont, Missouri began witnessing strange and unusual flying lights and objects which caused considerable consternation, mainly because few of them had ever given much thought to UFOs prior to their experiences.

Information emanating from another APRO member in the area of Piedmont indicates that more detailed and spectacular sightings have taken place but that in view of the publicity, the people involved have not made reports public. Efforts are being made at this time to obtain these reports and if APRO is successful, the details will be made public in future issues of the *Bulletin*.

The most spectacular of the Piedmont sightings (investigated by Field Investigators Mr. and Mrs. Eugene Smith) involved the experience of Mr. Reggie Bone, who is basketball coach for the Piedmont High School.

At approximately 8:30 p.m. on the 21st of February 1973, Mr. Bone and five of his players were returning to Piedmont after having lost a regional basketball game. They had just turned off Highway 60 onto Route 21 when the Coach and the boys noticed bright lights in the sky. Deciding that they must have been helicopter lights they continued toward Piedmont. When they arrived at the intersection of Route 21 and Highway 34 one of the boys noticed the same bright lights again, only this time the lights were sitting still at an estimated 50 feet altitude and approximately 200 yards from the road. Bone then stopped the car and turned off the engine and lights. He and the boys got out of the car to get a closer look at what they at the time believed to be a helicopter in trouble.

What they saw was four lights of different colors: white, amber, blue and red. They were flashing and rotating but apparently not in any particular sequence. Due to the brightness of the lights the group was not able to discern the shape of the object behind the lights (if there was one). The six individuals

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Mr. Milos Krmelj, APRO's Representative for Yugoslavia has forwarded the following information relating to a report of occupants at a village about 30 kilometers from Ljubljana. The information came to Mr. Krmelj through the Astronomical Geophysical Observatory (AGO) which is the organization which people call when they have made UFO observations. However, AGO doesn't take the reports seriously, therefore Mr. Krmelj and his UFO study group offered to investigate such cases as are referred to them.

This case involves only one witness, who does not wish to be publicly identified, but who is generally considered to be reliable and honest. An innkeeper, Mrs. H, is 60 years old and at the time of the sighting was returning home from the hairdresser's at 9 a.m. on the 7th of October, 1972. She was bicycling along a cartway when she spotted two figures a considerable distance away, making their way along the edge of a hill.

The figures were dressed in "sort of white gowns" which reached the ground, there was a black belt around the area just below the chest and they wore black round-shaped caps on their heads. The faces were dark and she was not able to observe features (possibly because of the distance because at their nearest point they only came within 150 meters—approximately 475 feet).

The lady said that the spectacle was so strange that she descended from her bicycle and walked for a while in order to watch them. Then she climbed back on the bicycle and began to follow their tracks. However, because it was getting late she decided to go home, afraid that her family had not awakened and that the inn was not open. She looked around for someone else, but seeing no one, left. By then the figures were out of sight. She told her husband of the experience, suggesting that they go back to see what "it was all about" but he didn't want to go and the matter was forgotten.

Mrs. H. said that the figures were about 1 meter (40 inches) in height and she got the impression that one of the figures was a head higher than the other. They walked together, she said, with their shoulders touching.

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Greenwell Resigns

Richard Greenwell, APRO's Assistant Director from December, 1968 through March, 1973, has resigned his post with APRO for personal reasons. During his tenure with the organization he was instrumental in implementing several improvements in organizational procedure and his contributions were many. He will remain as a member and Field Investigator for APRO, and we at Headquarters wish him the best of luck in his future ventures.

New Office Manager

With the resignation of Mr. Greenwell, APRO's business office will be supervised by Mrs. Sheila Kudrle. Mrs. Kudrle has been a member of APRO for some time

and as well as being a competent manager, she is also an enthusiastic supporter of the organization.

Out of town members who wish to visit the office should inform Mrs. Kudrle by mail ahead of time and, upon arriving in Tucson, call the office before dropping

Apology

The January-February *Bulletin* was very late because all of the headquarters staff with the exception of Mr. Lorenzen fell victim of the London influenza epidemic and work had to be postponed until they were well enough to perform their duties.

As a result, this issue will be mailed late. We hope, however, to be ahead of schedule so that the May-June issue will

be ready for mailing long before Mr. and Mrs. Lorenzen begin their vacation on July 2. They plan to see and visit with many members in the Middlewest.

Lorenzens to Visit Middlewest

For the first time in 7 years Mr. and Mrs. Lorenzen will be returning to the Middlewest for a long-overdue vacation, visiting their native states of Minnesota and Wisconsin respectively. Because APRO limits the time available away from Headquarters, they will not be able to make contact with a lot of the members. However, their schedule and itinerary are the following:

They will fly to Rochester, Minnesota on July 2, and will be the guests of Mr. and Mrs. David Lorenzen at Grand Meadow through the 5th. On the 6th they will motor to Barron, Wisconsin where they will attend the Barron High School Graduates Homecoming (Mrs. Lorenzen's school) through the 8th. From the 9th through the 15th they will be traveling south through Wisconsin to visit Mrs. Lorenzen's family there, and into Illinois to visit friends and members in Peoria, Illinois.

From the 16th through the 20th of July Mr. and Mrs. Lorenzen will be in Chicago where Mr. Lorenzen will be conducting business on behalf of his firm, Lorenzen Music Enterprises. They will depart on the 21st for Rochester, Minnesota and the flight back to Arizona.

From July 2nd through the 5th, members can reach them at the home of David Lorenzen at Grand Meadow, Minnesota, and from the 6th through the 8th they will be at the Cameron Motel, Cameron, Wisconsin. At this writing no reservations have been made in Chicago, but members wishing to visit with the Lorenzens can learn their location by calling Mr. Fred Merritt at Area Code 312, Telephone: 629-5256, during the week following July 9th.

Needless to say, they are most eager to visit members they have not met before and to renew old acquaintances.

Organizational News and Notes

The membership will be pleased to know that APRO's efforts are not confined to investigating and publishing UFO reports. Various individuals have been additionally occupied in their efforts to keep the UFO subject before the public and to further understanding of the problem.

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Occupant

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Mrs. H. told some people of the occurrence, but they tended to ridicule the episode so she discontinued any further conversation about it. During the discussion, however, one of the men at the inn asked where she had seen the figures, she told him, and he said that the night before his children had come running home very frightened, saying that they had seen two white figures near the field at the turnip plantation. The figures had "risen up" out of the turnip field and began to approach the children and they became frightened and ran home. The little girl was so frightened that her parents had to leave the light on in her room all that night, the father said.

When questioned by Mr. Krmelj, the children yielded the following information: At 7:30 p.m. the children saw two "strange creatures" with white hoods on their heads, and the "rest of them" was black. They were moving slowly from the field toward the road. The youngsters said the figures were quite close, about two meters away, when they first spotted them. One of the children said that their faces were "spotted" and they they wore a round, white cap and they seemed to be creeping on their hands and knees. They said they had seen them on two occasions, were not sure of exact dates, but in the evenings, and that on the second evening the two figures walked upright and wore white "gowns", and one was larger than the other.

Whereas Mrs. H. had not noted any kind of vehicle in the vicinity, the children said that a Fiat 750 was behind the figures with its lights on. It cannot be established with certainty that a Fiat 750 was, in fact, in the vicinity and inasmuch as small, compact-car-sized UFOs have been seen on the ground and flying through the air, it is possible that what the children assumed was a Fiat 750, was not. It was dark or fairly so and the lights on the vehicle might have served to hide the actual contours of the object.

It is interesting to note that the details of the second sighting of the figures by the children generally matches that of Mrs. H.'s description, i.e., that they were wearing white "gowns" and that one of them was taller than the other.

Mr. Krmelj's report included other sightings in that general area indicating that at least that section of Yugoslavia experienced a "flap" in the fall of 1972 as did other areas around the globe.

New Policy

In the past it has been APRO's policy to confine the contents of the Bulletin to

articles and information produced by APRO members only. Beginning with the July-August 1973 issue, the *Bulletin* will make space available to any individual reporting sound, scientifically-based research or data pertaining to UFOs.

Contributions will be submitted to APRO's panel of scientific and technical consultants for evaluation. The Editor will make the final decision on publication, based upon the judgements rendered by two or more referees. Papers will be judged on their clarity, soundness of scientific principles, and general value to the advancement of our understanding of the UFO phenomenon.

Articles will be divided into two categories: research papers and letters. Letters will be published under the heading "Technical Comments," and may only refer to material previously published in the *Bulletin*. Research reports may deal with any topic related to the subject of UFOs, but the treatment of subjects such as ETH must be clearly connected with UFOs. Both letters and research papers will be refereed prior to being considered for publication.

Papers must be kept as short as possible and must include the author's name and address (though anonymity may be granted if requested). Double or triple-spaced typewritten manuscripts on paper no larger than 8-1/2 x 11-inch (22 x 28-cm) are preferred. Limit printing to one side of the sheet and number each page. Manuscripts should be addressed to the Editor, and are dated on receipt at APRO.

Contributors should select a style and format that best suits the interests of a wide variety of readers, but not at the expense of the author's viewpoints. Technical details, for example, ought not be omitted if they are necessary to the discussion. References should always include the name(s) of the author(s), date and location of publication, and name of publisher, if known.

Piedmont

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observed the lights for approximately 13 minutes during which time the objects did not move or make any sound.

At the end of that period the lights began to rise straight up at high speed, then stopped and headed toward the tree line and disappeared behind a hill. The night was clear, there was no wind or moon, and the temperature was approximately 45 degrees.

Some of the more interesting cases follow:

At about 4:30 p.m. on the 22nd of March, 1973, Mr. Ron Miller and Joe King were enroute from Southeast Missouri State University, east of Patterson in Wayne County on Missouri State Highway 34. They observed a metallic-looking object which appeared to reflect the sunlight. They stopped the car to get a better look, glanced away for a second and when they looked back the object was gone.

Another most interesting sighting was made by Mrs. Margorie Cundiff, manager of the Piedmont Country Club. Sunday, May 25th, was a misty day and at just after 12 noon Mrs. Cundiff was driving across the dam, happened to look out across the lake to check the water level because of the large amount of rain the area had recently received.

She suddenly noted a "fast movement" and waves, and thought someone was water-skiing. Then a "flat, square-topped object" came up out of the water, and made a big turn. Her description in Mr. Sexton's column does not say what exactly happened to the object, whether it continued down the channel or if it took to the air.

A few nights later, Mrs. Cundiff said, she was awakened by her dogs growling. She said she put them out and they started barking angrily. Looking out, she noticed a strange light and decided to drive out and see what it was. She drove down by the dam, whereupon her car radio ceased to function. She drove off the dam, she said, and a quarter of a mile down the road the radio began to play again.

In an interview with radio station KPWB in Piedmont, Earl Turnbaugh said that he observed a cone-shaped object hovering about 40 feet above a field near Brushy Creek, south of Piedmont on the night of March 14. The object was visible only during lighting flashes and a rod was seen protruding from the top of it, according to Turnbaugh.

In the early stages of the activity a self-proclaimed UFO "expert" arrived upon the scene and by the time he departed he had succeeded in frightening the local populace by regaling them with tales of dead and maimed people who had been victims of UFOs.

Mr. Kim Sexton, writing in the Independence, Missouri Examiner devoted a three-part series to the situation in Piedmont, and was quite candid in his description of the "expert".

At the end of the first in the series Mr. Sexton said: "Some persons seem to take advantage of the fears of the community. I have found on two UFO research missions. Read tomorrow about "UFOlogists" who live comfortably at no charge when a panic-stricken community reaches out to them."

In his second of the series, Mr. Sexton pointed out that he had met the "UFO expert" while researching the "Missouri Monster" which had been dubbed

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Piedmont

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"Momo' some time back so he was familiar with the fellow's credentials and knowledgability. And apparently he found both lacking.

The expert was constantly aware of cameramen, microphones and anyone connected with the news media. He tried to make a press release concerning an alleged report about a UFO which hit a car, but KPWB's news director, Mr. Dennis Hovis, refused to broadcast or sign his name to anything which could not be verified and the expert said that the owner of the car did not want any publicity and would not give out his name. Had the report been valid, the individual could easily have been interviewed to the satisfaction of Mr. Hovis and the story could have gone out, providing it had any substance at the outset

The expert also tried to get the Examiner to pay for a light plane search of the area, which they declined, whereafter the expert persuaded one of the recent UFO witnesses to get a pilot to do it for no charge.

After the airplane trip, the expert claimed that he had seen two "saucer nests" from the air and elected then to take a caravan out to the area (at night). Photographers, the sheriff, high school students and "ufologists" met at the radio station to start out on their "saucer watch" but the expert did not want to proceed until the cameramen appeared. Sexton later learned that the photographers went out on their own, simply to avoid the expert, who had gotten under quite a few skins by that time. Ultimately, after stopping several times to check maps, tune his walkie-talkie, etc., the expert got lost. Meanwhile the camera crews claimed they had gotten some good UFO shots.

What was probably a very serious and interesting series of sightings at Piedmont, Missouri, turned out to be a comedy of errors and ego. The latter, unfortunately, is one of the problems in the UFO research field, and little can be done about it until we all learn to recognize the symptoms.

In summary, we might note that the photo of a gyroscope-shaped "object", liberally dispensed by the press as being a UFO, was nothing more or less than a lens flare and is such a common thing that any experienced investigator recognizes it immediately. But either the "expert" is not experienced in this area of photography or he chose to ignore it in favor of the publicity which it would net for him.

In the future, it is hoped that members will call in the first inkling of a localized

UFO "flap" so that APRO investigators can get to the scene and at least attempt to offset the efforts of the sensationalists.

Corrections

On Page 11, Column 1, of the January – February 1973 issue "Primary Analysis of 22 September 1972 Western Pacific API" should have read: "Preliminary Analysis," etc. Note 7 of the same article should have omitted "United Nations" since COSPAR is affiliated with the International Council of Scientific Unions (ICSU), not the UN.

On Page 3, Column 3 Line 7 of the same issue, "Strange Object Found On the Moon": 100 atmospheres should have read 1,470 lb/sqin, not 1,407. Also on Page 3, but on Line 15, Lunarkhod should have been designated as Lunokhod.

Students Watch UFO in Rhode Island

Mr. John D. Small has forwarded the following details concerning an unidentified object observed by children at the Our Lady of Mercy elementary school in East Greenwich, Rhode Island on April 2, 1973 at about 2:35 p.m.

Patrick Casey, a 6th grade student, was near the window sharpening a pencil just before school was to be adjourned for the day. He spotted the dull-grey object which had a bright red light at the top portion and white lights outlined the sloping sides. These lights flashed on and off from left to right while the red light remained constant. The whole object resembled an up-side down soup bowl.

Tom Mainelli, another boy in the class, was one of those alerted by Patrick and they all flocked to the windows to watch the object. Mainelli estimated that they watched it for perhaps seven minutes before it tilted, and, appearing to shine or reflect light, went beyond some trees to the west. The Mainelli boy estimated that it was at about 150 feet altitude when first spotted hovering.

Patrick said that when he first spotted it the object appeared to be descending, and he let out a whoop, whereupon it moved a few feet up into the air and hovered. He then alerted the class and they all ran outside to get a better look. Although no sound was heard a smell like burned powder or gunsmoke was very obvious and the students later said that it made them "feel giddy and tired". The object had proceeded toward a nearby cemetery so the children ran after it whereupon the object came back toward the school. Other children joined the

group and then the object began to move off and shot off on an upward "slope".

The boys said that they tried to get teachers to come out to view the thing but were told that they were "busy" Patrick called the East Greenwich police and was disappointed because the officer he talked to sounded bored and the call lasted only 10 seconds. When police were later contacted to confirm the report they said that no one had called them about it except the students.

Award

(Continued from Page One)

attended the panel meetings including the meeting at Tucson on March 23, 24 and 25 when the decision was made to make the \$5,000 award to the Johnson family.

In late 1972 The National Enquirer approached. APRO concerning the feasibility of turning the accumulated mail resulting from the contest over to this organization for categorizing, investigation and filing. Mrs. Cooper and Mrs. Lorenzen undertook to read each report and to reserve the better ones for follow-up investigation. The remaining cases are categorized according to worth and filed.

The APRO staff was particularly happy to undertake the task for the Enquirer in order to preserve the hundreds of sightings which had, heretofore, not been reported or adequately investigated.

News

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For over a year Dr. Robert Creegan, APRO's Consultant in Philosophy and Professor of Philosophy at State University of New York at Albany, has been teaching a course on "Disputed Borders of Science" which includes a study of the UFO problem. The course has been well attended and the students raise some penetrating questions.

Another Ufology course is being offered by the Edison Community College at Fort Myers, Florida and is presided over by Mr. Everett R. Walter, one of APRO's Field Investigators. The Fort Myers News-Press carried an item announcing the eight week course which commenced on April 25th.

Mr. Leon Bonotaux, a California member, has been busy over the years with frequent lectures on UFOs to various civic groups. His lecture not only includes slides of UFO photos, but he has constructed models of various UFO prototypes which are hung on display during his talks.

Rhode Islanders were treated to a

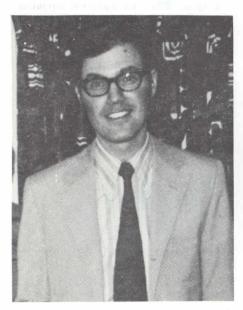
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News

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lecture by Donald R. Todd, APRO Field Investigator on the evening of the 23rd of April at the Pontiac Free Library in Kingston, Rhode Island. Circulars were distributed which mentioned APRO prominently and a large audience attended. There was no admission and a free buffet was served.

The foregoing efforts are partially responsible for the growth of APRO membership in the last year and hopefully other individuals in the membership will follow suit. Certainly Dr. Creegan, Mr. Walter, Mr. Bonotaux and Mr. Todd are to be congratulated on their accomplishments.



Walter N. Webb

New Consultant

It is with pleasure that APRO welcomes Mr. Walter N. Webb to APRO's staff of Consultants, in the capacity of Consultant in Astronomy. Mr. Webb, who has been a member of APRO since 1958, has many accomplishments to his credit. From 1952 through 1956 he was a student staff member of the Clarke Observatory at Mount Union College in Alliance, Ohio. He obtained his B.S. in biology (cum laude) from that college in 1956.

From 1957 through 1958 he served as an observer in the Satellite Tracking Program, Smithsonian Astrophysical Observatory, Cambridge, Massachusetts. His duties included 6 months of photographing artifical satellites from the satellite tracking station on Maui, Hawaii.

Mr. Webb served as Chief Lecturer at the Charles Hayden Planetarium in Boston, Massachusetts from 1958 to 1969, and from 1969 to the present he has served as Assistant Director at the Planetarium Museum of Science. He has also served as Special Advisor in Astronomy for the National Investigations Committee (NICAP) from 1960 to 1973 when he resigned that post.

Mr. Webb has personally witnessed UFO sightings which he characterizes as "nothing too spectacular but nevertheless unidentified" and is certainly well qualified to make the judgement. We expect that Walter Webb will be a valuable addition to the Consulting staff of APRO.

The Sedona "UFO Track" Photo

Introduction: In addition to the following analysis by Dr. James A. Harder, it is vital to the evaluation of this case that the following facts be made part of the record:

Mr. C. Dwight Ghormley is a retired schoolteacher of excellent reputation who resides in Texas. For several years he spent part of the summer months visiting his sister in Flagstaff, Arizona and made a habit of driving about the general area enjoying the cool mountain air and scenery.

On the day in question, Mr. Ghormley was en route to Sedona, Arizona when he spotted what appeared to be a tank (of the commercial carrier type) about 3/4 mile off the road about 1 mile out of Sedona. Because it was in what appeared to be an inaccessible spot, he decided to stop and photograph it. After snapping the shutter, he lowered the camera, rolled the film, then looked back to the object only to find that it was gone and a cloud of smoke or dust was much in evidence.

Later, after finishing the roll of film, he took it to be developed at a photography shop in Flagstaff. When he called for his prints Mr. N.C. McEntarfer pointed out the strange images on the print and asked Mr. Ghormley about them. Only then did he recall the object he had seen some time before. When Mrs. Lorenzen interviewed him about the experience, he said that he had almost decided that he had been "seeing things" and had forgotten the incident.

Our experience indicates that this particular photograph may be one of the big breakthroughs in UFO research. It has been established to our satisfaction that Mr. Ghormley had had no interest in UFOs prior to his experience, and only to a minor degree since.

April 18, 1973

ANALYSIS by Dr. James A. Harder

Dr. Harder is APRO's Consultant in Civil

Engineering and an expert photographer.
Who among UFO investigators has not

wished for a clear, close up, detailed photograph of a UFO? And what would it prove? Surely it would help settle the question, still on some agendas, of whether UFOs actually exist. The issue of UFO existence will be with us for some time yet, we may assume; however, is it not time to go beyond that issue to the host of scientific problems and questions that are raised once one has accepted the fact of UFO existence? It seems to me that we should be well into a second phase of UFO investigations in which the object is not so much to prove the existence of UFOs, as to try to understand more about them. With this in mind, consider the accompanying photograph of a UFO in motion. From the standpoint of "proving" the existence of UFOs it might be considered a flop, insofar as no details are seen - there is only what appears to be a sequence of spots. But from the standpoint of understanding more about UFOs it may be one of the most valuable photographs ever taken. For from it, and the data provided by the camera it was taken with, we can infer speeds, accelerations, and find even greater puzzles than we dreamed of a few short years ago. More about the puzzles later.

The photograph was taken by Mr. C. Dwight Ghormley at about 1:35 p.m. on September 23, 1967, near Sedona, Arizona. He observed what looked like a bright tank "in a horizontal position" and decided to photograph it with his Kodak "Holiday" 127 camera. But after he released the shutter and turned to roll the film to the next frame, he looked back to see only a cloud of smoke or dust. He estimated that the object was 3/4 of a mile away from a consideration of its position relative to the background bluff. By a stroke of luck, Mr. Ghormley took the film to be developed to the photography shop of an APRO member, Mr. N.C. "Mac" McEntarfer of Flagstaff, who recognized its value and has been able to find the original photographer, the negative, and the camera. Mr. Ghormley, the photographer, has been very cooperative and helpful and has provided APRO with the negative and the camera for evaluation. Apparently Ghormley released the shutter at nearly the exact moment (actually about .005 second later) that the UFO began a nearly vertical ascent. The rest of the story is provided by the film record.

The camera was an inexpensive Kodak model 127 "Holiday" with a fixed focus, single speed shutter, and a fixed lens opening. When examined in my laboratory in April, 1973 the shutter opened (from 10% to 90%) in 5

(See "UFO Track" - Page Six)

"UFO Track"

(Continued from Page Five)

milliseconds (ms), remained open for a duration of 20 to 28 ms and closed in 4 ms. The duration showed a random fluctuation partly due to the different pressures used to press the release and apparently partly due to some stickiness in its operation. The calculated effective speed was thus 1/35 second. The camera was reported to have a shutter speed of 1/75 second, so I then flooded the shutter mechanism with ethylene dichloride solvent, and found that the rise time remained at 5 ms, but that the duration was shortened to 11 to 14 ms, and the fall or closing time to 3 ms. After this cleaning the effective shutter speed was 1/60 second, which is probably close to its speed when new. The shutter speed in 1967 was probably some value between these two, and I will assume a duration of 20 + 5 ms, an opening time of 5 ms, and a closing time of 4 ms.

From the focal length of the lens, the estimated distance to the object, and the length of the trace of the negative, we can calculate the distance (at right angles to the line of sight) that the object moved. Measurements from the negative show that from the lowest barely visible image to the brightest of the images is 0.14 inches; from the brightest image to the last distinct image is 0.20 inches, and above that there is a faint trace 0.10 inches long, for a total length of 0.44 inches. At a distance of 4,000 feet from the camera, this represents a transverse distance of 700 feet traversed in approximately 29 ms. The calculated speed is thus on the order of 24,000 feet per second, or 16,000 miles per hour.

This is indeed a very high speed, but is still within the range of speeds measured by radar (as for example in the Lakenheath, England case). It is high enough to give the impression of "disappearance" to a nearby observer, insofar as it is more than several times the speed of a rifle bullet.

One of the most fascinating aspects of the photograph is the large number of distinct images that appear. From their density on the negative, which is greater than that of the brightest part of the sky, we infer that the object was very bright, and that possibly the distinct images are due to a flashing on and off of a light source. Since each flash could only be of about 0.001 second (1 ms) in duration and the sky was exposed for the entire shutter opening, the object brightness was on the order of 25 to 50 times that of the sky.

A second possible inference for the distinct images raises even more severe problems but it must be entertained: that is, that the object was not only very



bright, but that it actually slowed down or stopped some 15 or 20 times during the time the shutter was open, and achieved truly fantastic accelerations between such stops. This inference is not forced by the present evidence, for which the flashing light hypothesis is perfectly tenable, but by further photographic evidence that was published in the January 1973 issue of PhotoGraphic magazine, pp 35-37. APRO has so far been unable to examine the original Kodachrome transparency of the picture published therein, so our conclusions are only tentative. However, the picture published shows three distinct images of a classical UFO domed disc, and it appears that the images could not have been produced by just a flashing light, insofar as it is the background that appears obscured in three places by an opaque object. From the data provided, the average speed of the object seems to be on the order of a thousand feet per second, only a few percent of the speed inferred from the Flagstaff photograph. However, this is fast enough, together with the inferred stop-and-go character of the motion, to raise very basic questions about the mode of propulsion of these

UFOs.

A final question may be raised concerning the authenticity of the photographs. Without the original transparency, the Oregon (PhotoGraphic magazine) photo is hard to evaluate; but the authenticity of the Flagstaff photograph is well established. Apart from the character of the original photographer, the analysis of the original negative, and the circumstances of its being found quite by accident, there remains a very cogent argument for authenticity: who would think to fake a UFO picture of this sort? If one were to set out to fake a UFO photograph, surely he would fake a clear, close-up, detailed picture! And naturally, of a UFO standing still.

ADDRESS CHANGES

Always include old and new Zip Codes.

Space Probe From Epsilon Bootis

As a follow-on to our initial article in the Jan-Feb. 1973 Bulletin concerning Mr. Duncan Lunan's work with long delayed echoes, we present a summary of Mr. Lunan's paper published in Spaceflight Magazine, which he was kind enough to furnish us, preceded by Mr. Lunan's letter to APRO's Brad Sparks and Mr. Gatland's introduction.

Space limitations and copyright considerations require that we abbreviate and paraphrase but we have made every effort to include all important points of information. We are considering means of making the complete paper available to those members who wish to study it in it's entirety. Mr. Lunan's complete list of references, even though some may not apply to the abbreviated version, is included.

Dear Mr. Sparks,

Thank you for your letter of 15th March and your interest in my work on the long delayed echoes of the 1920's. I am taking the first opportunity to send you a copy of "Spaceflight" containing my paper on the subject; for reasons apparently beyond everyone's control, copies reached me only yesterday. In the meantime, certain misconceptions have arisen about the nature of this work. May I therefore emphasise, with reference to Mr. Gatland's introduction to the piece and the line of argument pursued in it, that I have assumed for the sake of argument that the long-delayed echoes of the 1920's came from a space probe, as Professor Bracewell suggested in his 1960 paper. The interpretation I have offered on that basis has aroused such interest that a serious attempt will begin shortly to contact the hypothetical space probe, using equipment supplied by EMI Limited, under the direction of Mr. A.T. Lawton of that company.

I look forward to any comments you have at this stage.

Yours Sincerely, D.A. Lunan, M.A.

The astonishing idea that our Solar System had been visited by a space probe from another civilization was widely reported in December. The theory stems from original work By Mr. D.A. Lunan, a graduate of Glasgow University, who found that certain long delayed echoes of equally spaced radio signals transmitted from Earth could be interpreted in the form of a code. The data used by Mr. Lunan are those recorded in the 1920's by Norwegian, Dutch and French experimenters, who noted that delay times of the echoes varied from one signal

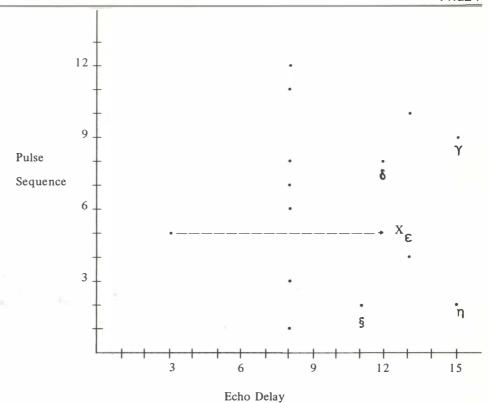


Figure 1

to the next. This paper, which attempts to interpret the patterns so formed, suggest that a space probe in the vicinity of the Earth may have been trying to make contact by returning our own signals. It is suggested that the signals of October 1928 were star maps, identifying the probe's origin as the double star Epsilon Bootis and putting its arrival here at 13,000 years in the past. Although more evidence is required to support this hypothesis, the logic of Mr. Lunan's work is of interest in its own right as a contribution to the problem of interstellar communication. We leave the reader to decide for himself: (a) the reality of the long-delayed echoes as but a purely natural phenomenon; and (b) the validity of the interpretation that has been placed upon them.

Kenneth W. Gatland

In 1960 R.N. Bracewell suggested that advanced communities might use space probes as a means of communication. (1) He suggested that such probes might listen for our radio signals and repeat them back to us after obvious delays such as those reported in the 1920's. "Should we be surprised" Bracewell wrote, "if the beginning of its message were a TV image of a constellation?" In 1965 James Strong suggested that the probe might still be orbiting the earth. (2)

American experimentors Taylor and Young first reported echoes coming from apparent distances of 2900 to 10,000 Km in 1927.(3) Hals, an engineer, reported to Carl Stormer of Oslo(4) that echoes of 3 seconds delay had been heard at Eindhoven, Holland. On 11 October 1928 Carl Stormer, with Hals, helped by Van der Pol transmitting from Eindhoven, picked up 3 second echoes on 31.4 meters which changed to echoes varying from 3 to 15 seconds (signal pulses were transmitted at 20 second intervals.) Echoes were received in the following delay sequence: 8, 11 – 15, 8, 13, 3, 8, 8, 8 – 12, 15, 13, 8, 8. In two cases two echoes were heard, 4 seconds apart. (6)

Says Mr. Lunan, "If these echoes were returned to earth by a space probe, it seems incredibly unlucky that it should have happened at a time when they were assumed without question to be natural phenomena."

To the author, the series of 3 second echoes without Doppler shift constitute the statement, "here I am in the orbit of your moon", while the varied series means something much more elaborate. Inspired by Bracewell's remark concerning constellation figures, he graphed the delay time of each echo of the Van der Pol series against its position in the sequence presenting double echoes on the same line. Graphing delay time on the vertical axis produced nothing significant but when delay time was graphed horizontally the result was a striking but incomplete resemblance of the constellation Bootes. Epsilon Bootis

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Probe

(Continued from Page Seven)

was missing but when the 3 second point was transferred from the left of the vertical barrier formed by the 8 second points, it completed the constellation figure by marking the position of Epsilon Bootis (See Figure 1). This is interpreted to mean that Epsilon Bootis is the origin of the probe. Also, that if we had returned the pattern with Epsilon Bootis in its proper place, (showing that we understood the code) we would have triggered release of the probes' complete contact program.

In the first Bootes figure, Alpha Bootis is misplaced. However, its position, because of its large proper motion⁽⁸⁾ corresponds to where it would have been approximately 12,600 years ago. A later transmission showed its current position as well. Presumably the probe had up-dated its star map. Why would the probe use the second as a unit of time? It probably learned from us. The first Eindhoven experiment sent groups of three pulses spaced over two seconds at five second intervals. The largest length of time that divides evenly into both 2 seconds and 5 seconds is 1 second.

When the spacing was increased to 20 seconds the probe was able to begin using its variable delay code. It is noted that when the time base was increased to 30 seconds on the evening of 11 October, the probe did not respond immediately but on 24 October, its next transmission, the full range of 3 to 30 seconds was utilized. Oslo and Eindhoven received 48 echoes on 24 October; only 21 were published to the Author's knowledge. When these are plotted they produce a sky map centering around the constellation Hercules. The north celestial pole location 13,000 years ago is given.

Hals heard delayed echoes again in February 1929 as did Andreas Kleve at Bodo⁽⁹⁾ and Appleton and Barrow at Kings College, London but apparently records were not kept.

In May 1929, the French Navel vessel Inconstant transmitted two dots every 30 seconds in a fixed musical sequence in a listening experiment conducted over a period of 3 days.(10)(11) Echoes ranged from 1 to 30 seconds plus two 31 second echoes and one 32 second. On two occasions when the operator omitted sending pulses he got "echoes" anyway at 5 seconds and 10 seconds respectively. This suggests that the probe was beginning to anticipate the pulses from earth. The full results of this test were published(13) and the author is currently working on a detailed report developing his decoding of the various panels. From a segment of this series which he calls "Panel 7", he obtains the message "Our home is Epsilon Bootis, which is a double star. We live on the sixth planet of seven, counting outwards from our sun which is the larger of the two. Our sixth planet has one moon, our fourth planet has three, our first and third planets each have one; our probe is in the orbit of your moon," plus bits of information about their planetary system. Apparently they use the distance from their planet to their sun as an Astronomical Unit to measure distances in space as we do.

The Author discusses reasons why the twin suns Epsilon Bootis are unlikely candidates for planetary systems from the view of modern astronomy and invites discussion of information gleaned from the 7th Panel.(7)(14)

He discusses also the possibility that his interpretation may be illusory and that the echoes may be a natural phenomenon. He says, "If two people attempt the Times crossword puzzle and one fails to solve it, that does not prove that the Times crossword puzzle is a natural phenomenon — and if they both produce the same solution that suggests but does not prove that the solution is correct."

Appleton and others apparently carried out further research in 1934 but the author has been unable to secure details. In 1947 through 1949 Budden and Yates carried on a search for long delayed echoes with negative results. (15) In 1967 a program was initiated at Stanford. No results were obtained until February 1970 when three echoes were heard. (Man-made interference has been a major obstacle to both these programs.) Stanford is investigating an hypothesis concerning natural long delayed echoes.(12) They have, since 1970, accumulated a record of 20 to 30 instances of what might be long delayed echoes. No long sequences have been recorded and never more than two echoes in one day. (16)

Between 1932 and 1969 the radio journal QST reports 40 convincing cases of long delayed speech echoes on various frequencies. (17) Also, there are reports (as yet unverified) of long delayed echoes occurring as interference on satellite communication frequencies. "The persistent unimaginative use of echoes suggests that the 1920 signals were returned by a machine artifact rather than by *** piloted spacecraft."

The author closes by suggesting that we now attempt to contact the probe by laser.

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The APRO Seal

The Latin words impressed upon APRO members' plasticized cards read: AD VERITAT PETENDA which, translated into English means, simply: "Toward Truth". It is the official corporate seal registered with the Arizona Corporation Commission.

Celestial Events — June/July, 1973

JUPITER is the most prominent celestial body in June and July (1973), besides the Sun and Moon, with a visual magnitude of -2.1 on 1 June and reaching its maximum brilliancy in 1973 at the end of July (mag. -2.4). Jupiter reaches its apex ever earlier in the morning (morning star) as it approaches opposition on 30 July. (To locate the Sun, Moon and Jupiter, see table below.)

VENUS remains inconspicuous, despite its magnitude of -3.4, due to the proximity of the Sun. MARS, a morning star, is brightening considerably and by the end of July is mag. -0.6. SATURN is not notable in June and July.

SIRIUS (mag. -1.47) and CANOPUS (mag. -0.73), the two brightest stars, attain their apexes in the evening in June and in the morning in July. Canopus is never visible North of latitude 41°N on the Earth's surface. (To locate these stars, see table below.)

CONJUNCTIONS of note are of Jupiter and the Moon at 2121 UT on 19 June and at 2153 UT on 16 July. In both cases, Jupiter is about 8 lunar diameters (4°) South of the Moon.

Major METEOR SHOWERS occur on about 29 May-18 June, 24 June-6 July, and 26-31 July. The Arietids (29 May-18 June), Zeta Perseids (1-16 June) and Beta Taurids (24 June-6 July) are the last daytime showers of the year. The only significant nighttime shower in this period, the Delta Aquarids (26-31 July), will be seen with very little obscuring moonlight (2-20% illumination; see table below). (To locate the points of meteor appearance, radiants, of all four showers, see table below.)

Astronomical Ephemeris 3 (June-July 1973)

Date	Canopus	Jupiter	Sirius	Sun	Meteor	Date of	Radiant l
(0000 UT)	GHA Dec	GHA Dec	GHA Dec	GHA Dec	Shower	Maximum	GHA Dec
l Jun	154° -53°	295° -18°	148° -17°	181° +22°	Arietid	8 Jun	211° +23°
l Jul	183 -53	326 -18	178 -17	179 +23	Zeta Perseid	9 Jun	195 +24
l Aug	214 -53	360 -19	208 -17	178 +18	Beta Taurid	29 Jun	190 +23
					Delta Aquarid	29 Jul	328 -17

Moon²

Date (0000 UT) 1 Jun 3 5	184° 153 124	+24°	0% 5 20	Date (0000 UT) 17 Jun 19 21 23	346° 323 302		99% 91 77	Date (0000 UT) 3 Jul 5 7	143° 119 97	Dec +13° + 2 - 9			321° 300 277	- 5° + 5	88% 73 52
9	78	- 5	62	25	258	+12	37	11	52	-23	83	27	220	+24	11
11	56	-15	80	27	232	+21	17	13	28	-25	94	29	190	+20	1
13	34	-22	93	29	202	+25	3	15	4	-22	100	31	163	+10	2
15	10	-25	99	l Jul	17 I	+22	0	17	342	-15	98	2 Aug	139	- 2	14

At 0000 UT on the date indicated (GHA increases about 15%hour)

Iowa Fireball

The "Iowa Fireball" of 1969 is a prime example of a daytime meteor reported as a UFO. Observers from Illinois to Colorado reported a bright green or silver-blue object (which later broke up) with a fragmented white trail on a heading of 280° at 2252 UT on 5 June 1969. (See The A.P.R.O. Bulletin July-August 1969, p. 6.)

Most witnesses correctly identified the objects as meteors. However, about two years later, NICAP, evidently unaware of the early contemporary accounts, located and interviewed a U.S. Federal Aviation Administration air traffic controller who saw the objects and believed them to be UFOS (UFO Investigator, February 1972, p. 2; my thanks to P.J. Klass for his analysis of this report).

The controller was observing flight procedure aboard an airliner near St. Louis, Missouri, when the co-pilot called

his attention to a "formation" of four moving objects. The larger of the four appeared to be "hydroplane-shaped," about 18-20 feet long, 12-14 feet wide, and 7-8 feet thick (though there was no way he could have estimated the size). All were described as having the color of "burnished aluminum" with bluish-green "power sources" in the rear. The three smaller objects in NICAP's drawing resemble LGM-30 (Minuteman) ICBMs!

A stream of meteors sighted under unusual conditions became a flight of UFOs due to reliance upon: The testimony of only one seemingly credible witness interviewed long after the occurrence; his recollection of an apparently unconnected radar contact as possibly lending weight to the original observation; and a description that did not seem to correspond to any known conventional phenomena. (Who ever heard of daytime meteors?)

We would do well to heed Dr. J.A. Hynek's advice, "Beware of UFO reports from single witnesses; one can never be too careful, even in instances in which the reporter is adjudged to be reliable."

> Brad Sparks A.P.R.O. Member

APRO Informationsblatt Fur Osterreich

Mr. Alexander G. Keul, APRO's Representative for Austria has forwarded a copy of "APRO Informationslbatt Fur Osterreich" which is an information sheet in German which Mr. Keul is distributing in Austria to people interested in the UFO mystery. It is rewarding to see a plan brought to fruition and Mr. Keul informs us that he has recruited his first member as a result of the information

The staff hopes that other overseas members and Representatives will follow Mr. Keul's lead and attempt to bring in more members and keep the public informed via this method.

Please Note:

Quite often we dispatch investigators to interview witnesses of UFO sightings which come to us via newspaper clippings. It is imperative that those who forward clippings give us the name of the paper, the city and state, and the date. This may simply be penned in on the clipping, as long as it is included.

Address Changes

Addressograph plates are filed by zip code. In view of the fact that over 2500 membership plates are filed, it is difficult to locate a member if he or she does not include his old zip code along with change of address. Please help the office staff to operate smoothly and efficiently and include old and new zip codes with address changes!

Next Issue

Latest information concerning the alleged crash of a UFO on April 17, 1897 in Aurora, Texas, will be featured. Illness and a death in the Lorenzen family prevented this issue from being mailed on time.

²Dates (UT) of lunar phases: New Moon (0% illuminated) | June; First Quarter (50% ill.) | 7 June; Full Moon (100% ill.) | 15 June; Last Quarter (50% ill.) | 23 June; New Moon 30 June; First Quarter 7 July; Full Moon 15 July; Last Quarter 23 July; New Moon 29 July.

³See the January-February 1973 APRO Bulletin (pp. 8-9) for detailed explanation.

Formulas:

LHA = GHA - West long.
LHA = GHA + East Long.
sin alt. = (sin decl.) x (sin lat.) + (cos decl.) x (cos LHA) x (cos lat.)

sin az. = - (cos decl.) x (sin LHA)/(cos alt.)